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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,729	07/02/2003	Kevin T. Chan	14227US01	5781
23446 7590 07/25/2008 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				
EXAMINER				
DAVENPORT, MON CHERI S				
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2616				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/612,729

**Applicant(s)**

CHAN, KEVIN T.

**Examiner**

MON CHERI S. DAVENPORT

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 21 April 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-30 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-9, 11-19, and 21-29** rejected under 35 U.S.C. 102 (a) as being anticipated by Applicant's admitted prior art (APA).

Regarding **Claims 1, 11, and 21** applicant's admitted prior art discloses a method for providing and configuring communication links, the method comprising:

determining any one usable media pair from all existing media pairs( see APA [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, therefore a usable media pair is determined from all existing media pairs, see also [12], and fig. 1, the first controller and the second controller is independent and all existing media pair for each controller is independent ));

selecting any one channel from all existing channels ( see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, therefore a channel is determined from all existing channels , see also [12], and fig. 1, the first controller and the second controller is independent and all existing channels for each controller is independent); and

assigning said selected any one channel to said any one media pair(see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels).

Regarding **Claims 2, 12 and 22** applicant's admitted prior art discloses everything as claimed above (see claims 1, 11 and 21). In addition, the method includes:

wherein said determining further comprises monitoring at least said any one usable media pair( see APA [06] lines 1-4, Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling interface, media pairs are monitored).

Regarding **Claims 3, 13 and 23** applicant's admitted prior art discloses everything as claimed above (see claims 2, 12 and 22). In addition, the method includes:

wherein said monitoring further comprises detecting an existence of a communication signal on said any one usable media pair( see APA [06], lines 1-9,Ethernet@wirespeed is used when channel or media characteristics have degraded, therefore usable media pairs are monitored in order to adapt and mitigate the problem).

Regarding **Claims 4, 14 and 24**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

further comprising determining which one of said all existing media pairs is capable of facilitating communication at a maximum communication speed ( see APA [06], Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift to maximum communication speed).

Regarding **Claims 5, 15, and 25**, applicant's admitted prior art discloses everything as claimed above (see claims 4, 14, and 24). In addition, the method includes:

further comprising cross-connecting said selected any one channel to said one of said all existing media pairs capable of facilitating communication at a maximum communication speed ( see APA [06], Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift( reads on cross-connecting) to maximum communication speed).

Regarding **Claim 6, 16, 26**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

further comprising determining which one of said all existing media pairs is capable of operating at a reduced communication speed ( see APA [06], Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift or reduce transmission speed ).

Regarding **Claims 7, 17 and 27**, applicant's admitted prior art discloses everything as claimed above (see claims 6, 16 and 26). In addition, the method includes:

further comprising cross-connecting said selected any one channel to said one of said all existing media pairs capable of operating at said reduced communication speed ( see APA [06], Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift( reads on cross-connecting) to reduce transmission speed).

Regarding **Claims 8, 18 and 28**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

flipping at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs (see APA [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, reconfigure and reassign reads on flipping media pair assignment of all existing media pairs); and

defining said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration(see APA [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, reassigned channel and media pair assignment becomes the current default channel, (reads on current default channel), to maintain communication link).

Regarding **Claims 9, 19, and 29**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

further comprising identifying a status of at least one of said all existing media pairs and at least one of said all existing channels (see APA [06] lines 1-4, Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling interface, media pairs are monitored).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 10, 20, and 30** rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Bontemps et al. (US Patent Number 5,923,663).

Regarding **Claims 10, 20, and 30**, applicant's admitted prior art discloses everything as claimed above (see claims 9, 19, and 29). In addition, the method includes:

However applicant's admitted prior fail to specifically point out further comprising storing said identified status as claimed.

Bontemps et al. teaches storing said identified status (see column 3, lines 50-52, the physical layer device monitors its receive input for transmitted communication signals and provided a link detect signal indicative thereof, which reads on storing of status, see also col. 13, lines 30-45, the LINK\_DETECTx signals are used in a logic state machine, which stores current state of the ports).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type( see Bontemps et al. col. 3, lines 39-41).

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/  
Supervisory Patent Examiner, Art Unit  
2616

/Mon Cheri S Davenport/  
Examiner, Art Unit 2616  
July 16, 2008